

# SUBSTANCE ABUSE RELATED ILLNESSES: HEPATITIS C, CIRRHOSIS, HIV/AIDS, TUBERCULOSIS

# AN EDUCATIONAL FACT SHEET FROM THE FLORIDA ALCOHOL & DRUG ABUSE ASSOCIATION

Many people are aware of the effects HIV and how it is contracted as it has received a great deal of publicity in recent years. However, many are unaware of other diseases which can be equally life threatening such as Hepatitis C, Cirrhosis, and Tuberculosis (TB). These illnesses do not receive the same publicity, but Florida residents are being affected by them. Statistics from the Florida Department of Health indicate that over 1,300 Floridians are infected with TB. 2,799 are infected with HIV, the virus that causes AIDS, and 2,558 have AIDS. Chronic liver disease and cirrhosis were responsible for the deaths of 1,937 Floridians in 1997.

People engaged in substance abuse, particularly injection (IV) drug use, are at a greater risk of contracting disease. Habitual use of drugs and alcohol is related to generally poorer health and nutrition. Alcohol and drug use can impair the judgement of the user to the point that they make unwise decisions, putting their health at risk. In addition, specific risks like sharing needles, cookers and works increase the risk of illness. There are also environmental factors strongly related to the drug-using lifestyle such as violence, crime, prostitution, homelessness, and unsanitary living conditions that place the user at greater risk of disease.

## **HEPATITIS C**

Hepatitis C is a viral disease that affects the liver. It is caused by the Hepatitis C virus (HCV), one of six virus types that cause most cases of hepatitis. HCV infection is the most common chronic bloodborne infection in the United States. HCV is found in the blood of people who have Hepatitis C. The virus is spread when a person's blood comes into contact with an infected person's blood. The most common method of transmission is injection drug

use. In addition to being spread by needles, HCV can be spread by sharing cocaine straws. Hepatitis C can also be spread by having sex with a person infected with HCV; however, infection is rare among long-term, steady, monogamous partners. Other possible modes of transmission include contaminated equipment used in tattooing and body piercing, or sharing personal items such as razors or toothbrushes with infected people. There is no vaccine which can prevent Hepatitis C.

HCV is not spread by sneezing, coughing, hugging, casual contact, sharing eating utensils or drinking glasses, or food or water.

Most people who have Hepatitis C do not have any acute symptoms and do not know they are infected with HCV. Symptoms (when present) may include:

- Fatigue
- Loss of appetite
- Abdominal pain
- Joint pain
- Nausea
- Vomiting

Most people infected with HCV have a normal life span. But, in approximately 20 percent of people with chronic Hepatitis C infection, the disease gradually progresses over 10 to 30 years and leads to scarring, or cirrhosis of the liver. And, in a small number of these people, HCV can lead to cancer of the liver and/or death. Treatment for HCV depends on the extent of a person's disease. For most people, lifestyle changes, such as not drinking alcohol, are sufficient. For people with more active disease, doctors may prescribe medications. HCV positive people should avoid alcohol. New medications (over-the-counter and herbal) should not be taken before consulting with a doctor. To prevent transmitting the HCV infection, HCV infected people should:

Abstain from blood, organ and tissue donation

- Avoid sharing toothbrushes, dental appliances, razors, or other personal care items that may have blood on them
- Cover cuts and sores on the skin to keep from spreading infectious blood or secretions

## **CIRRHOSIS**

Cirrhosis is a condition occurring when the liver becomes permanently injured and scarred. Scar tissue formed in the liver blocks the proper flow of blood through the liver. This can lead to high pressure on the portal vein and blood vessels, increasing the chance of breakage, causing bleeding in the stomach or esophagus. Blockage caused by scar tissue slows down the processing of nutrients, hormones, drugs and toxins by the liver. The production of proteins and other substances produced in the liver is also slowed.

There are many causes for cirrhosis. In the United States, chronic alcoholism is the most common cause. Fatty liver and alcoholic hepatitis can also result from alcoholism, but do not necessarily lead to cirrhosis. Cirrhosis may result from viral hepatitis (types B, C, and D) or from liver injury from a variety of inherited diseases such as cystic fibrosis, Wilson's disease or hemochromatosis. Blocked bile ducts can also cause cirrhosis. Symptoms of cirrhosis are:

- Fatigue, weakness, exhaustion
- Loss of appetite
- Nausea
- Weight loss
- Accumulation of water in the legs (edema) or abdomen (ascites)
- Bruising or bleeding easily
- Jaundice
- Gallstones
- Sensitivity to medications
- Vomiting blood

CAT scan, ultrasound, or biopsy can diagnose cirrhosis. Treatment depends on the type and stage of cirrhosis, however cirrhosis itself is irreversible. Alcoholic cirrhosis, for instance, can be treated by abstaining from alcohol and maintaining a nutritious diet. Cirrhosis resulting from hepatitis can be treated with steroids or antiviral drugs. Medications (such as diuretics and laxatives) and lifestyle changes (such as abstaining from salt) can be used to control the symptoms of cirrhosis.

Liver failure and portal vein bleeding are two serious problems when dealing with cirrhosis. Liver transplantation is highly effective.

# **HIV/AIDS**

Human immunodeficiency virus or HIV attacks the body's immune system and makes it less able to fight disease and other infections. Acquired Immune Deficiency Syndrome or AIDS, always develops from HIV infection, but not all HIV infected people develop AIDS. Some people have no symptoms, and may appear healthy, and may not even know they are infected. AIDS may develop from HIV after being infected for a number of years, or after being infected for only a short time. There is no vaccine that can prevent HIV. Symptoms of HIV infection are:

- Flu-like illness—fever, headache, malaise, enlarged lymph nodes
- Lack of energy
- Weight loss
- Frequent fevers and night sweats
- Persistent or frequent yeast infections
- Persistent skin rashes or flaky skin
- Herpes
- Shingles

AIDS is said to be present when the body's CD4+T cell count drops below 200. T cells help the body fight infections, but when the number drops extremely low the body becomes vulnerable to opportunistic infections. Healthy adults usually have a CD+4T cell count of 1,000 or more.

Opportunistic infections (bacterial or viral infections HIV negative people could easily fight off) in people with AIDS may cause the following symptoms:

- Coughing
- Shortness of breath
- Seizures
- Dementia
- Severe and persistent diarrhea
- Fever
- Vision loss
- Severe headaches
- Wasting
- Extreme fatigue
- Nausea
- Vomiting
- Lack of coordination
- Coma
- Abdominal cramps
- Difficult or painful swallowing

People with AIDS are also more prone to devel-

oping certain types of cancers, such as Kaposi's sarcoma or cancers of the immune system.

HIV is not an airborne or food-borne virus, and it does not live long outside the body. HIV can be found in the blood, semen, or vaginal fluid of an infected person. The three main ways HIV is transmitted are:

- through having sex with someone infected with HIV.
- through sharing needles and syringes with someone who has HIV.
- through exposure (in the case of infants) to HIV before or during birth, or through breast feeding.

Since 1985, blood has been screened for HIV before using it in transfusions to ensure a safe blood supply. HIV is not transmitted by day-to-day contact in the workplace, schools, or social settings. HIV is not transmitted through shaking hands, hugging, or a casual kiss. You cannot become infected from a toilet seat, a drinking fountain, a door knob, dishes, drinking glasses, food, pets, or donating blood.

HIV can be detected by testing a person's blood for the presence of antibodies (disease-fighting proteins) to HIV. HIV antibodies do not generally reach detectable levels until one to three months following infection, and may take up to six months to be detected in blood tests. Two types of tests are used to detect HIV: ELISA and Western Blot.

There are now a number of drugs available to treat HIV and AIDS, however they do not cure the infection, nor do they prevent the spread of HIV to other people.

### TB

Tuberculosis (TB) is a disease caused by bacteria called Mycobacterium tuberculosis. TB is spread through the air from one person to another. When an infected person coughs or sneezes, people nearby may breathe in the bacteria and become infected. When the bacteria is inhaled, it settles in the lungs and begins to grow. It may spread to other parts of the body such as the kidneys, spine or brain

TB is not spread by handshaking, sharing dishes or utensils with someone who has TB, or by sitting on toilet seats.

Many people who breathe in TB bacteria are able to fight the bacteria and keep them from growing. These people have TB infection, or inactive bacteria in their bodies, which remain alive and may become active later. People with TB infection may not feel sick or have any symptoms. TB disease is

what results when the body can't stop the bacteria from growing. This is more common in people with weakened immune systems, such as babies, young children and people with HIV. Other people at high risk for developing TB disease from TB infection are:

- people in close contact with a person who has infectious TB
- people who became infected with TB bacteria in the last 2 years
- injection drug users
- elderly people
- people with other immune system weakening diseases (substance abuse, cancer, leukemia, etc.)
- people from countries with high rates of TB

Symptoms of TB in the lungs are:

- a bad cough that lasts longer than 2 weeks
- pain in the chest, coughing up blood or sputum
- fatigue
- loss of appetite
- chills
- fever
- night sweats

The only way to find out if you have TB is to have a TB skin test. This can be done at your local health department or doctor's office. There is a vaccine for TB, called BCG that can produce a positive reaction to TB skin tests. However, the vaccine is not commonly used in the United States. TB infection can be treated with medication to keep it from developing into TB disease. This is called preventive therapy. The medication must be taken consistently and over a period of time (at least 6 months) to be effective. TB disease can also be treated and cured with medication. Again, the medication must be taken exactly as prescribed and for at least 6 months to be effective, and to prevent multidrug-resistant TB from developing.

### **REFERENCES**

American Liver Foundation. Cirrhosis: Many Causes, 1997.

Center For Disease Control and Prevention. AIDS Prevention Guide, n.d.

Center For Disease Control and Prevention. Prevention and Treatment of Tuberculosis Among Patients Infected with Human Immunodeficiency Virus: Principles of Therapy and Revised Recommendations, MMWR 1998:47.

Center For Disease Control and Prevention. Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Disease, MMWR 1998: 47.

Center For Disease Control and Prevention. TB Care Guide:

Highlights from Core Curriculum on Tuberculosis, 1994.

Center For Disease Control and Prevention. TB Facts for Health Care Workers, n.d.

Florida Department of Health. The Florida HIV/AIDS, STD and TB Monthly Surveillance Report, June 1999.

Florida Department of Health, Office of Vital Statistics. Florida Vital Statistics Annual Report 1997, July 1998.

National Clearinghouse for Alcohol and Drug Information. Questions and Answers About Hepatitis C, n.d.

National Digestive Diseases Information Clearinghouse. Cirrhosis of the Liver, 1991.

National Institute of Allergy and Infectious Diseases. HIV Infection and AIDS, 1994.

U.S. Department of Health and Human Services. Questions and Answers About TB, 1994.

U.S. Department of Health and Human Services. Tuberculosis: Get the Facts, n.d.



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